

ABSTRACT OF THE DISCLOSURE

It is an object to enhance the reliability of an emergency stop in a control system,
5 such as an NC apparatus system, in which, in order to reduce a dedicated line for an
emergency stop, emergency-stop information is embedded in an ordinary serial-data
frame. For that purpose, extracting units (125) and (126) are provided in a client control
apparatus, for extracting emergency-stop data and frame-error check data from a frame
that is transmitted from a host control apparatus or other client control apparatuses to
10 the client control apparatus. Moreover, outputting circuits (128), (129), and (130) are
provided in the client control apparatus, for, by checking the frame-error check data
extracted by the extracting units, determining whether or not the frame has been
generated normally in the host control apparatus or the other client control apparatuses,
and outputting the emergency-stop data to an apparatus to be controlled when the
15 emergency-stop data is embedded in the serial-data communication frame, and
condition in which the frame is not generated normally in the host control apparatus or
the other client control apparatuses is continued for a duration corresponding to a
plurality of frames.